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IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

- 1 1. (original) A method for registering at least one access point with a gateway in a
2 network, comprising:
3 broadcasting from a gateway, a discovery message to said at least one access
4 point in said network;
5 receiving from at least one access point receiving said discovery message, an
6 access point registration request comprising access point location, IP address, MAC
7 address, radio type, and power level information of said access point; and
8 storing said access point registration request information at said gateway.
- 1 2. (original) The method of claim 1, wherein each access point selects a random
2 delay prior to sending said access point registration request to said broadcasting gateway.
- 1 3. (original) A method for registering at least one access point with a gateway in a
2 network, comprising:
3 broadcasting a gateway discovery query message from said at least one access
4 point;
5 receiving from said at least one gateway, a respective service discovery message;
6 selecting an appropriate gateway in an instance where more than one service
7 discovery message is received; and
8 sending an access point registration request comprising access point location, IP
9 address, MAC address, radio type, and power level information of said access point to
10 said selected gateway.
- 1 4. (original) The method of claim 3, wherein said selecting further comprises:
2 determining if said access point is currently registered; and

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3 sending said service discovery message to said access point.

1 5. (original) The method of claim 3, wherein said selecting comprises:

2 determining an appropriate gateway using at least one of the following: a cost of

3 using a gateway, a load at a gateway, and system features provided by a gateway.

1 6. (original) The method of claim 3, wherein said sending an access point

2 registration request further comprises sending security information in said access point

3 registration request.

1 7. (original) The method of claim 6, wherein each access point selects a random

2 delay prior to sending said access point registration request to said gateway.

1 8. (withdrawn) A method of providing data services for a mobile host roaming

2 between access points associated with different gateways, comprising:

3 receiving wireless services from a first access point associated with a first

4 gateway;

5 sending a message to said first gateway indicating that said mobile host is

6 receiving signals from a second access point associated with a second gateway;

7 sending a request to be switched to said second access point to enable thereby a

8 registration with said second gateway; and

9 receiving buffered packetized information from said first gateway.

1 9. (withdrawn) The method of claim 8, wherein said message to said first gateway

2 comprises a layer-3 type message.

1 10. (withdrawn) The method of claim 8, wherein said sending said buffered

2 packetized information comprises:

3 sending a message from said second gateway to said first gateway instructing said

4 first gateway to forward said buffered packetized information to said second gateway;

5 and

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6 sending said buffered packetized information from said second gateway.

1 11. (withdrawn) The method of claim 10, further comprising:

2 instructing said first gateway to terminate wireless services from a first access
3 point associated with a first gateway.

1 12. (withdrawn) A method for providing wireless communications for at least one
2 mobile host in a wireless network environment using a communications protocol
3 comprising an access point location, an access point Internet protocol (IP) address, a
4 media access control (MAC) address, a number of access point radios, a radio type
5 protocol of each access point radio, a radio power level indicator, said method
6 comprising:

7 associating a mobile host with an access point;

8 registering said mobile host with a gateway via said communications protocol;
9 and

10 providing data communications services to said mobile host through said gateway.

1 13. (withdrawn) The method of claim 12, wherein said providing data
2 communications services comprises:

3 sending a request for services to a gateway including at least one level of quality-
4 of-service (QoS) related features.

1 14. (withdrawn) The method of claim 13, wherein said quality-of-service (QoS)
2 related features comprise at least one of a constant bit rate (CBR), a variable bit rate
3 (VBR), a real-time variable bit rate (VBR-rt), a controlled load, a guarantee service, and a
4 best effort service.

1 15. (withdrawn) A method of providing load balancing for data services for a
2 plurality of mobile hosts, comprising:

3 receiving a wireless service request from a first transceiver associated with a first
4 mobile host;

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5 determining bandwidth capacity for said first transceiver;
6 sending a wireless service rejection message to said first mobile host via said first
7 transceiver in an instance where said bandwidth capacity has exceeded a predetermined
8 threshold;
9 receiving a wireless service request from a second transceiver associated with said
10 first mobile host;
11 determining bandwidth capacity for said second transceiver; and
12 sending a wireless service acceptance message to said first mobile host via said
13 second transceiver in an instance where said bandwidth capacity is less than said
14 predetermined threshold.

1 16. (withdrawn) The method of claim 15, further comprising:

2 providing information to said first mobile host via said second transceiver.

1 17. (withdrawn) The method of claim 15, wherein said first and second transceivers
2 are respectively associated with first and second access points.

1 18. (withdrawn) The method of claim 15, wherein said first and second transceivers
2 are associated with a common access point.

1 19. (withdrawn) In a communications system for providing information, a computer
2 readable medium in a general purpose computer system that operates as a special purpose
3 controller when executing at least one program for broadcasting said information, a
4 communications protocol comprising:

5 an access point location;
6 an access point Internet protocol (IP) address;
7 a media access control (MAC) address;
8 number of access point radios; and
9 radio type protocol of each access point radio.

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1 20. (withdrawn) The computer readable medium of claim 19, wherein said
2 communications protocol further comprises:

3 a power level indicator of a currently utilized access point radio.

1 21. (withdrawn) The computer readable medium of claim 19, wherein said
2 communications protocol further comprises:

3 a frequency channel of each a currently utilized access point radio.

1 22. (withdrawn) The computer readable medium of claim 19, wherein said
2 communications protocol further comprises:

3 a lifetime indicator of a currently utilized access point radio.

1 23. (withdrawn) The computer readable medium of claim 19, wherein said
2 communications protocol further comprises:

3 a security indicator of a currently utilized access point radio.

1 24. (withdrawn) The computer readable medium of claim 19, wherein said access
2 point location comprises and alpha-numeric description of a hotspot associated with an
3 access point.

1 25. (withdrawn) The computer readable medium of claim 19, wherein said access
2 protocol IP address comprises a unique IP address of said access point.

1 26. (withdrawn) The computer readable medium of claim 19, wherein said radio type
2 protocol of each access point radio comprises at least one of a radio type selected from
3 the 802.11(a), 802.11(b), 802.11(g), and Bluetooth communication protocols.

1 27. (withdrawn) The computer readable medium of claim 20, wherein said power
2 level indicator provides indicia of signal strength of a beacon signal of an access point
3 radio received by said mobile host.

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1 28. (withdrawn) The computer readable medium of claim 22, wherein said lifetime
2 indicator comprises indicia representing temporal connectivity between an access point
3 radio and an associated gateway.

1 29. (withdrawn) The computer readable medium of claim 23, wherein said security
2 indicator comprises privacy keys to allow an access point to communicate with said
3 associated gateway.

1 30. (withdrawn) The computer readable medium of claim 19, wherein said
2 communications protocol further comprises quality-of-service related features.

1 31. (withdrawn) The computer readable medium of claim 30, wherein said quality-of-
2 service related features comprise indicia representing apportioned bandwidth for a mobile
3 host.

1 32. (withdrawn) The computer readable medium of claim 31, wherein said quality-of-
2 service related features comprise indicia of one of a best effort and dedicated bandwidth
3 level of service.

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